

### **AMENDMENT TO THE CLAIMS**

1. (Original) An electrospun fiber, wherein said fiber is produced from a conducting solution wherein said conducting solution comprises at least one mesoporous precursor material.
2. (Original) The fiber of claim 1, wherein the mesoporous precursor material comprises gels prepared with surfactants.
3. (Original) The fiber of claim 2, wherein said surfactants are selected from the group consisting of pluronic P-123, pluronic F-127, pluronic F-77, pluronic P-104, pluronic F-38, pluronic L-121, Vitamin E TPGS, Tergitols, Triton-X, polyethylene glycol, alkyl ammonium halides, alkyl amines and mixtures thereof.
4. (Original) The fiber of claim 1, wherein said mesoporous precursor material comprises a metal oxide selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.
5. (Original) The fiber of claim 1, wherein said fiber has a diameter ranging from about 10 nanometers up to about 1,000 nanometers
6. (Original) A network of fibers wherein, said network comprises fibers comprising mesoporous precursor material, and further wherein, said fibers are produced by electrospinning.
7. (Original) The fibers of claim 6, wherein the mesoporous precursor material comprises gels prepared with surfactants.
8. (Original) The fibers of claim 7, wherein said surfactants are selected from the group consisting of pluronic P-123, pluronic F-127, pluronic F-77, pluronic P-104, pluronic F-38, pluronic L-121, Vitamin E TPGS, Tergitols, Triton-X, polyethylene glycol, alkyl ammonium halides, alkyl amines and mixtures thereof.

11-30 (Withdrawn)

[[33]] 31. (Currently Amended) A method of making a network of fibers wherein, said network comprises fibers comprising mesoporous precursor material, and further wherein, said fibers are produced by electrospinning.

[[34]] 32. (Currently Amended) The method of claim 33, wherein the mesoporous material comprises gels prepared with surfactants.

[[35]] 33. (Currently Amended) The method of claim 34, wherein said surfactants are selected from the group consisting of pluronic P-123, pluronic F-127, pluronic F-77, pluronic P-104, pluronic F-38, pluronic L-121, Vitamin E TPGS, Tergitols, Triton-X, polyethylene glycol, alkyl ammonium halides, alkyl amines and mixtures thereof.

[[36]] 34. (Currently Amended) The method of claim 33, wherein said mesoporous material is a metal oxide selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.